



Mineral Industry Surveys

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SILVER IN APRIL 2004

U.S. mines produced 95,100 kilograms (kg) of silver in April 2004, according to the U.S. Geological Survey. Compared with that of February, production of silver was down 2%. Most of the decrease can be attributed to Nevada, where production was down by 5%.

The price of silver reached \$8.23 per troy ounce on April 7, the highest level since the third quarter of 1988. At \$6.72 per ounce, the first quarter 2004 average exceeded the first quarter average of 1998, when prices spiked in response to a United States-based investment firm's announcement that it had bought 4,000 metric tons (t) of silver. Aided by gold's strong performance, silver prices surged higher in April. The overwhelming driver to higher silver prices, however, has been the recent move into silver by investment funds (CRU International Ltd., 2004; Platt's Metals Week, 1998).

The price of silver in the domestic Chinese market rose to 69.98-70.76 yuan (\$8.45-\$8.54) per ounce at the end of March and to 71.53 yuan (\$8.64) per ounce at the end of April. The 71.53 yuan per ounce level was a 17-year high. The domestic Chinese market was influenced by the international market, where the price of silver reached 6-year highs. During periods of high international silver prices, Chinese producers increase their output in an effort to increase exports. In the January to February period, China's silver output reached 670 t, an increase of 22% over the 550 t produced in the same period in 2003. The

central government's export quota was set at 2,200 t, which, at current levels of exports, will be used up by the end of June (Antaike Precious & Minor Metals Monthly, 2004).

Consumer electronics contribute a significant portion of the lead found in landfills, which can contaminate drinking water supplies and have other toxic effects on the environment. A leading integrated circuit manufacturer will eliminate about 95% of the lead used in its processors and chipsets starting later this year. Instead of a lead-tin solder, the new chipset packages will use a tin-silver-copper alloy to connect the chip package to the motherboard. The manufacturer will begin shipping its lead-free technology with selected microprocessors and chipsets in the third quarter and embedded 1A processors in the fourth quarter (Electronic Design, 2004).

References Cited

Antaike Precious & Minor Metals Monthly, 2004, Chinese silver price soars, production increases: Antaike Precious & Minor Metals Monthly, no. 51, May, p. 4.

CRU International Limited, 2004, Silver, *in* Precious metals market outlook quarterly—1Q 2004: London, United Kingdom, CRU International Ltd., p. 1-14 [each section separately paginated].

Electronic Design, 2004, Getting the lead out: Electronic Design, v. 52, no. 10, May 10, p. 10.

Platt's Metals Week, 1998, Silver prices soar in reaction to Buffett buying: Platt's Metals Week, v. 69, no. 6, February 9, p. 1.

TABLE 1 MINE PRODUCTION OF RECOVERABLE SILVER IN THE UNITED STATES, BY STATE

(Kilograms)

		Other	
	Nevada	States ²	Total
2003: ^p			
April	21,500	71,500	93,000
May	27,700	78,400	106,000
June	26,600	79,000	106,000
July	28,900	69,600	98,500
August	28,800	68,100	96,900
September	31,900	73,700	106,000
October	27,700	77,600	105,000
November	30,600	75,400	106,000
December	28,300	81,200	109,000
January-December	322,000	914,000	1,240,000
2004:			
January	24,400	90,900 ^r	115,000 ^r
February	22,600	67,000 r	89,600 ^r
March	24,500 ^r	72,300 ^r	96,800 ^r
April	23,200	71,900	95,100
January-April	94,700	302,000	397,000

^pPreliminary. ^rRevised.

¹Data are rounded to no more than three significant digits; may not add to totals shown

 $^{^2}$ Includes Alaska, Arizona, California, Colorado, Idaho, Missouri, Montana, Utah, and Washington.

TABLE 2 SILVER PRICES

(Dollars per troy ounce)

Engelhard Industries:	
2003:	
Low/date	4.39 March 24
High/date	5.98 December 31
Average	4.91
2004:	
February:	
Low/date	6.05/2
High/date	6.78/17
Average	6.48
March:	
Low/date	6.71/3
High/date	7.91/31
Average	7.30
April:	
Low/date	5.88/29
High/date	8.23/7
Average	7.09
Year to date:	
Low/date	5.88 April 29
High/date	8.23 April 7
Average	6.81
Handy and Harman:	
2003, Average	4.91
2004:	
February	6.48
March	7.28
April	7.09
Year to date	6.80
London Final:1	
2003, Average	4.88
2004:	
February	6.44
March	7.23
April	7.06
Year to date	6.76

¹Reported as "London Spot/US Equiv."

Source: Platts Metals Week.

 $\label{eq:table 3} \text{U.S. IMPORTS OF SILVER, BY COUNTRY}^I$

	Bullion		Doré		Ores and co	Ores and concentrates ²		residues	Total	
	Silver		Silver		Silver		Silver		Silver	
	content	Value	content	Value	content	Value	content	Value	content	Value
Period and country	(kilograms)	(thousands)	(kilograms)	(thousands)	(kilograms)	(thousands)	(kilograms)	(thousands)	(kilograms)	(thousands)
2003	4,000,000	\$630,000	233,000	\$72,200	2,540	\$1,590	92,600	\$10,700	4,330,000	\$714,000
2004:										
January	292,000	56,400	22,300	8,300			6,530	956 ^r	321,000	65,600
February	328,000	67,000	28,300	9,770	456	82	6,890	4,440 ^r	364,000	81,300 °
March:										
Australia							569	87	569	87
Belgium	223	44							223	44
Canada ³	76,000	17,000	250	40			5,970	1,270	82,200	18,300
China	20,100	4,040							20,100	4,040
Dominican Republic ³							95	84	95	84
Hong Kong	19,200	3,890							19,200	3,890
Mexico ³	205,000	45,000	23,500	8,990					229,000	54,000
Panama ³	70	8							70	8
Peru	41,700	9,020	3,010	755					44,700	9,770
Taiwan ³							357	105	357	105
Total	363,000	79,000	26,800	9,780			6,990	1,540	397,000	90,300
Year to date	984,000	202,000	77,400	27,800	456	82	20,400	6,940	1,080,000	234,000

^rRevised. -- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes silver content of base metal ores and concentrates.

³All or part of these data have been referred to the U.S. Census Bureau for verification.

⁴Less than 1/2 unit.

 $\label{eq:table 4} \text{U.S. IMPORTS OF SILVER, BY COUNTRY}^{\text{I}}$

	Other unwrought silver (gross weight)		Metal powder (gross weight)		Silver nitrate (gross weight)		Semimanufactured forms ² (gross weight)		Waste and scrap (gross weight)	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Period and country	(kilograms)	(thousands)	(kilograms)	(thousands)	(kilograms)	(thousands)	(kilograms)	(thousands)	(kilograms)	(thousands)
2003	281,000	\$42,200	20,800	\$4,160	661	\$96	355,000	\$52,600	886,000	\$107,000
2004:										
January	1,020	1,820	3,020	732			13,600	2,360	19,000	9,460
February	5,320	867	2,940	711			33,100	7,730	78,800	9,560
March:	,									
Australia									8	160
Brazil							11,900	1,760	19	31
Canada ³	1,740	400					910	138	11,700	1,390
China ³			20	5			748	43	170	93
Costa Rica									14,300	1,090
Dominican Republic ³	518	93					1	5	306	108
France ³			435	132			122	44	23	425
Germany ³			26	6			3,650	1,020	178	376
Hong Kong ³							-4	2		
India ³							7,010	227		
Israel ³							5	4	181	24
Italy ³							482	74	25	411
Japan ³	6	3	1,600	388			1,750	545	321	276
Korea, Republic of ³							2,510	223		
Mexico ³	11,000	1,760					9,870	3,940	7,520	2,560
Panama									44	282
Peru							19	377		
Philippines									3,760	140
Poland							1,570	206		
Switzerland ³			200	49						
Taiwan							15	2		
United Kingdom ³							71	26	6,440	602
Venezuela									224	2,090
Other ³							84	12	70	423
Total	13,200	2,260	2,280	580			40,700	8,640	45,300	10,500
Year to date	28,600	4,940	8,240	2,020			87,400	18,700	143,000	29,500

⁻⁻ Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Containing 99.5% or more by weight of silver.

³All or part of these data have been referred to the U.S. Census Bureau for verification.

TABLE 5
U.S. EXPORTS OF SILVER¹

	Bull	lion	Do	ré	Ores and co	ncentrates ²	Total		
	Silver		Silver		Silver		Silver		
	content	Value	content	Value	content	Value	content	Value	
Period and country	(kilograms)	(thousands)	(kilograms)	(thousands)	(kilograms)	(thousands)	(kilograms)	(thousands)	
2003	135,000	\$20,700	19,800	\$3,200	57,900	\$16,200	212,000	\$40,300	
2004:	_								
January	492	88	2,940	576			3,430	664	
February	106	28	2,940	592	134	27	3,180	647	
March:	_								
Canada ³	189	42					189	42	
Gambia, The					50	12	50	12	
Hong Kong	10	3					10	3	
Korea, Republic of	25	4					25	4	
Mexico	1,990	357					1,990	357	
Norway			158	39			158	39	
Spain			1,180	244			1,180	244	
Switzerland	2,990	687	2,220	514			5,210	1,200	
Uruguay	1,700	559					1,700	559	
Other ³					30	6	30	6	
Total	66,900	1,650	3,560	797	80	18	10,500	2,470	
Year to date	598	1,770	5,870	1,170	134	27	6,610	1,310	

⁻⁻ Zero.

 $^{^{1}\}mathrm{Data}$ are rounded to no more than three significant digits; may not add to totals shown.

²Includes silver content of base metal ores and concentrates.

³All or part of these data have been referred to the U.S. Census Bureau for verification.

TABLE 6 U.S. EXPORTS OF SILVER¹

		Other unwrought silver (gross weight)		Metal powder (gross weight)		Silver nitrate (gross weight)		Semimanufactured forms ² (gross weight)		Waste and scrap (gross weight)	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	
Period and country	(kilograms)	(thousands)	(kilograms)	(thousands)	(kilograms)	(thousands)	(kilograms)	(thousands)	(kilograms)	(thousands)	
2003	26,000	\$5,470	473,000	\$81,500	69,200	\$9,120	344,000	\$59,400	2,020,000	\$410,000	
2004:	-										
January	4,800	941	41,500	7,140	4,010	541	15,600	2,710	184,000	34,300	
February	2,570	689	43,000	7,320	5,500	556	15,900	2,760	182,000	39,700	
March:	-										
Australia ³	- 				3,200	332					
Belgium	- 		254	45			1,690	288	22,500	4,950	
Brazil	- 						342	58			
Canada ³	911	174	1,740	287	1,670	219	5,400	933	106,000	15,800	
China	84	19	62	11			84	14	29,500	4,120	
Dominican Republic	545	120					213	36			
Finland	- 		290	49							
France	- 		4,550	778			877	155			
Germany	- 		9,600	1,640			849	160	21,900	3,190	
Hong Kong ³	114	43	2,960	503			1,010	178	104	13	
Italy	- 		38	7			267	45	21,800	3,910	
Jamaica	- 						119	20			
Japan ³	1	3	12,500	2,470			279	47	275	2,820	
Korea, Republic of ³			8,860	1,510			1,500	255	3,630	503	
Kuwait ³					159	9					
Lebanon			157	27							
Mexico ³			443	75	795	37	1,020	216	47	8	
Netherlands			968	165			1,670	289			
Philippines							109	17			
Poland							1,440	249			
Saudi Arabia									12,100	1,580	
Seychelles									288	38	
Singapore			353	60			806	141			
Spain							1,490	253			
Sweden			2,070	351			39	9	5,650	964	
Taiwan ³			8,130	1,380			232	44	1,610	719	
Thailand	2,220	519	353	60			57	10			
United Kingdom	-		5,390	927	80	18	639	109	2,680	531	
Other ³	274	54	167	33	127	20	140	24			
Total	4,150	930	58,900	10,400	6,030	636	20,300	3,550	228,000	39,100	
Year to date	11,500	2,560	143,000	24,800	15,500	1,730	51,800	9,020	595,000	113,000	

⁻⁻ Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown. ²Containing 99.5% or more by weight of silver.

³All or part of these data have been referred to the U.S. Census Bureau for verification.